

BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT NEHRU NAGARA AND SURROUNDING AREAS IN WARD NO.01 OF YELAHANKA SUB-DIVISION

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Estimate Cost Rs.	50.00	Lakhs
								Rate		Amount
1	Removing B.S. slab of Drain and stacking (P No 25 / I N 5 32)									
		Sqm								
	Post office Road		2	105.00	1.20		252.00			
	Cross Roads		1	355.00	0.75		266.25			
						Total Qty	518.25			
						Deduct 20% for Missing and broken Slabs(-)	103.65			
						Net Qty	414.60	72.95		30244.74
	Basic Rate	62.00								
	Area Weightage @ 6%	3.72								
	Sub-Total	65.72								
	AD-HOC 11%	7.23								
	Total	72.95								
2	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications MORTH Chapter 3 (P.142/I 19.1)									
	Desilting for Drain	Cum								
	Post office Road		2	105.00	0.60	0.60	75.60			
	Cross Roads		1	355.00	0.60	0.60	127.80			
						Total Qty	203.40	96.48		19624.28
	Basic Rate	82.00								
	Area Weightage @ 6%	4.92								
	Sub-Total	86.92								
	AD-HOC 11%	9.56								
	Total	96.48								
3	KSRB M300-19. Removal of unserviceable soil including excavation loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. (P No 143 & I No 19.20)									
		Cum								
	Debries		2	5.00	2.00	0.75	15.00			
			5	10.00	3.00	0.45	67.50			
			15	5.00	2.00	0.60	90.00			
						Total Qty	172.50	43.53		7509.65
	Basic Rate	37.00								
	Area Weightage @ 6%	2.22								
	Sub-Total	39.22								
	AD-HOC 11%	4.31								
	Total	43.53								
4	Refixing stone slabs of drains and pointing in C M (1:3)(P.No 25/I.No 5.33)									
		Sqm								
						Qty Vide Item No.1	414.60	89.42		37074.20
	Basic Rate	76.00								

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Area Weightage @ 6%	4.56							
	Sub-Total	80.56							
	AD-HOC 11%	8.86							
	Total	89.42							
5	KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No. KBS 2 1(a) / 2 3 5, No 5/Item No. 2 3)KPWD S.R 2016-17								
	Neharu Nagara	Cum							
	1st Cross Roads (E/S)		1	93.00	0.90	1.00	83.70		
	for Culverts		1	3.00	1.80	1.35	7.29		
					Total Qty		90.99	222.38	20234.12
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Sub-Total	200.34							
	AD-HOC 11%	22.04							
	Total	222.38							
6	KSRRB M200-24 - dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces no exceeding 0.02 Cum in volume and stock piling at designated locations and disposal of dismantled materials upto a lead of 1000 meters, stacking serviceable and unserviceable materials separately complete as per specifications. MORTH specifications. No. 202, (P No. 138/ Item No. 18.47)								
	Neharu Nagara	Cum							
	1st Cross Roads		1	54.00	3.30	0.25	44.55		
	2nd Cross Roads		1	58.00	3.50	0.25	50.75		
	3rd Cross Roads		1	64.00	3.30	0.25	52.80		
			1	55.00	3.00	0.25	41.25		
	4th Cross Roads		1	50.00	2.80	0.25	35.00		
	Cross Roads		1	78.10	4.00	0.25	78.10		
			1	25.00	4.00	0.25	25.00		
					Total Qty		327.45	918.92	300901.86
	Basic Rate	781.00							
	Area Weightage @ 6%	46.86							
	Sub-Total	827.86							
	AD-HOC 11%	91.06							
	Total	918.92							
7	KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications specification. No. KBS 2.1 (a) / 2 3 1 (P 5/1 2 1)								
	Neharu Nagara	Cum							
	1st Cross Roads		1	54.00	3.30	0.15	26.73		
	2nd Cross Roads		1	58.00	3.50	0.15	30.45		
	3rd Cross Roads		1	64.00	3.30	0.15	31.68		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
			1	55.00	3.00	0.15	24.75		
	4th Cross Roads		1	50.00	2.80	0.15	21.00		
	Cross Roads		1	78.10	4.00	0.15	46.86		
			1	25.00	4.00	0.15	15.00		
	Post office Road		1	125.00	2.10	0.30	78.75		
					Total Qty		275.22	184.73	50840.00
	Basic Rate	157.00							
	Area Weightage @ 6%	9.42							
	Sub-Total	166.42							
	AD-HOC 11%	18.31							
	Total	184.73							
8	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No 133/ Item No 17 1)								
		Cum							
				Qty Vide Item No 2+3+5+6+7=			1069.56	111.00	118721.00
	Average Weight of Earth 1.28 Tonne/Km								
	Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
	Add loading and unloading Item No 17.1)	68.00							
	Sub-Total	100.00							
	AD-HOC 11%	11.00							
	Total	111.00							
9	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to relieve bituminous treatment including cost of all materials, labour, HOM of machineries complete as per Specifications. (P.No 157 & I No 21.2)								
		Sqm							
	Post office Road		1	125.00	4.90		612.50		
					Total Qty		612.50	3.53	2162.00
	Basic Rate	3.00							
	Area Weightage @ 6%	0.18							
	Sub-Total	3.18							
	AD-HOC 11%	0.35							
	Total	3.53							
10	KSRRB M400-6.1 Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. Close graded granular sub-base material as per 400-1 For Grading- II Material (P.No 155 II No 20.4.2)								
		Cum							
	Post office Road		1	125.00	2.10	0.15	39.38		
					Total Qty		39.38	1848.44	72782.00

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Basic Rate	1571.00							
	Area Weightage @ 6%	94.26							
	Sub-Total	1665.26							
	AD-HOC 11%	183.18							
	Total	1848.44							
11	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P No 158 I No 20 18)								
		Cum							
	Post office Road		1	125.00	2.10	0.225	59.06		
	Potholes		10	1.20	1.20	0.15	2.16		
			15	1.50	1.20	0.15	4.05		
	cross cuttings		5	7.00	0.75	0.15	3.94		
					Total Qty		69.21	1962.57	135829.00
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Sub-Total	1768.08							
	AD-HOC 11%	194.49							
	Total	1962.57							
12	KSRRB 4-1.3 Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications Specification No KBS 4.1, 4.2 (P 12/14.3)								
	Neharu Nagara	Cum							
	1st Cross Roads		1	54.00	3.30	0.15	26.73		
	2nd Cross Roads		1	58.00	3.50	0.15	30.45		
	3rd Cross Roads		1	64.00	3.30	0.15	31.68		
			1	55.00	3.00	0.15	24.75		
	4th Cross Roads		1	50.00	2.80	0.15	21.00		
	Cross Roads		1	78.10	4.00	0.15	46.86		
			1	25.00	4.00	0.15	15.00		
	1st Cross Roads (E/S)		1	93.00	0.90	0.15	12.56		
	for Culverts		1	3.00	1.80	0.15	0.81		
					Total Qty		209.84	5524.14	1159157.29
	Basic Rate	4695.00							
	Area Weightage @ 6%	281.70							
	Sub-Total	4976.70							
	AD-HOC 11%	547.44							
	Total	5524.14							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
13	KSRB 4-1 7 Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification No. KBS 4.1.4.2 (P No. 13 / Item No.4 7)								
	for culverts	Cum							
	Ramp		2	0.80	0.60	0.10	0.10		
					Total Qty		0.10	6214.80	596.62
	Basic Rate	5282.00							
	Area Weightage @ 6%	316.92							
	Sub-Total	5598.92							
	AD-HOC 11%	615.88							
	Total	6214.80							
14	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC cement at 300kgs. with 20mm and down size granite metal coarse aggregates at 0.69cum and fine aggregates at 0.43cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No.1500, 1700, 2200 -do- Wall and bottom thickness 15cm (P No 265 / It No 37.59.2)								
	1st Cross Roads (E/S)	Cum							
	bed		1	93.00	0.90	0.15	12.56		
	side wall		2	93.00	0.15	0.60	16.74		
	culvert						29.30		
	bed		1	3.00	0.90	0.15	0.41		
	wall		2	3.00	0.15	0.75	0.68		
							1.08		
					Total Qty		30.38	12246.05	371973.85
	Basic Rate	10408.00							
	Area Weightage @ 6%	624.48							
	Sub-Total	11032.48							
	AD-HOC 11%	1213.57							
	Total	12246.05							
15	KSRB 4.9.2 Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications Specification No. KBS 4.6.3-do-TMT Bars Fe 500 P.17/It No 4.46.2 (rates effects from 01-07-2017)								
		tonne							
			50% of Qty Vide item No 5			in Qll	14.648		
			60% of Qty Vide item No 5				0.648		
						in tonne	1.530	71310.20	109072.51
	Basic Rate	60607.00							
	Area Weightage @ 6%	3636.42							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Sub-Total	64243.42							
	AD-HOC 11%	7066.78							
	Total	71310.20							
16	Providing and fixing RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
	Sqm								
	1st Cross Roads (E/S)		1	93.00	0.75		69.75		
							20% for Missing and broken Slabs	103.65	
						Total Qty	173.40	2100.00	364140.00
	Data Rate	2100.00							
17	Providing and fixing RCC precast Slabs of 0.20 m thick of CC 1:2:4 with 20 mm and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
	Sqm								
	for Culvert		1	3.00	1.80		5.40		
						Total Qty	5.40	4402.79	23775.07
	Data Rate	4402.79							
18	KSRRB M600-6 Cement concrete pavement. Construction Un- reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 with 25mm and size graded granite metal , coarse and fine aggregate with superplasticiser @ 3lts conforming to IS9103-1999 Reaffirmed-2008, mixed in a concrete mixer of not less than 0.6cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing) & Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, admixtures as approved curing compound, finishing to lines and grades as per drawing complete as per specifications (P No.174 / It No.22.6.2)								
	Neharu Nagara	Cum							
	1st Cross Roads		1	54.00	3.30	0.125	22.28		
	2nd Cross Roads		1	58.00	3.50	0.125	25.38		
	3rd Cross Roads		1	64.00	3.30	0.125	26.40		
			1	55.00	3.00	0.125	20.63		
	4th Cross Roads		1	50.00	2.80	0.125	17.50		
	Cross Roads		1	78.10	4.00	0.125	39.05		
			1	25.00	4.00	0.125	12.50		
						Total Qty	163.73	6901.94	1130019.41
	Basic Rate	5866.00							
	Area Weightage @ 6%	351.96							
	Sub-Total	6217.96							
	AD-HOC 11%	683.98							
	Total	6901.94							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
19	Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.160/lt No.21.6)								
		Cum							
			1	125.00	2.10		262.50		
Potholes			10	1.20	1.20		14.40		
			15	1.50	1.20		27.00		
			5	7.00	0.75		26.25		
					Total Qty		330.15	30.59	10100.00
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Sub-Total	27.56							
	AD-HOC 11%	3.03							
	Total	30.59							
20	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No 507 (P No 162&163 II.No 21.17.6)								
		Cum							
			1	125.00	2.10	0.050	13.13		
profile correction		10% of Qty Vide Item No.4			61.25	0.050	3.06		
					Total Qty		16.19	6976.06	112925.00
	Basic Rate	5929.00							
	Area Weightage @ 6%	355.74							
	Sub-Total	6284.74							
	AD-HOC 11%	691.32							
	Total	6976.06							
21	KSRRB 500-7 Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen (VG20) on the prepared black topped surface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications (P No 160 & I No 21.7)								
		Sqm							
			1	125.00	7.00		875.00		
					Total Qty		875.00	12.94	11325.00
	Basic Rate	11.00							
	Area Weightage @ 6%	0.66							
	Sub-Total	11.66							
	AD-HOC 11%	1.28							
	Total	12.94							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
22	KSRRB M500- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with Mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No.500.9 complete in all respects complete as per specifications MORTH Specification No 509 (P.No.164 Item No.21.22.6)								
		Cum							
			1	125.00	7.00	0.040	35.00		
					Total Qty		35.00	7863.22	275213.00
	Basic Rate	6683.00							
	Area Weightage @ 6%	400.98							
	Sub-Total	7083.98							
	AD-HOC 11%	779.24							
	Total	7863.22							
23	KSRRB M800-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.181 & I.No.24.15)								
		Sqm							
			2.5	125	0.15		46.88		
					Total Qty		46.88	515.35	24157.00
	Basic Rate	438.00							
	Area Weightage @ 6%	26.28							
	Sub-Total	464.28							
	AD-HOC 11%	51.07							
	Total	515.35							
24	5.29(b)Providing and fixing pre cast solid cement concrete kerb stones made out of No 272.21 C.C 1:2:4 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc. complete (P.No.25 /IL No 5.30)								
		No							
			2	65.00		$\frac{130}{0.45}$	288.89		
						Say	280.00	368.28	103117.00
	Basic Rate	313.00							
	Area Weightage @ 6%	18.78							

SL No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Sub-Total	331.78							
	AD-HOC 11%	36.50							
	Total	368.28							
17	KSRB 15-19.2 Providing and applying ready mix priming coat over concrete/masonry/asbestos cement sheet/plastered surfaces including preparing the surface after thoroughly cleaning of oil,grease,dirt and other foreign matter and sand papering including cost of materials, labour, complete as per specifications. (Page no 121 / It no 15.80)	Sqm	2	120.00		0.40	96.00		
						Total Qty	96.00	30.59	2937.00
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Sub-Total	27.56							
	AD-HOC 11%	3.03							
	Total	30.59							

18	KSRB 800-1.Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. (Page No 182 & Item No 24 1)	Sqm							
						Qty Vide Item No 15 27	96.00	70.60	6777.00
	Basic Rate	60.00							
	Area Weightage @ 6%	3.60							
	Sub-Total	63.60							
	AD-HOC 11%	7.00							
	Total	70.60							
						Sub-Total Amount			

450199.00
 4502411.00
 135036.00
 435072.00
 45012.00
 45024.00
 315088.00
 315169.00
 3660.00
 2324.00

- 27 3% for KRIDL Charges
- 30 1% for Labour Cess
- 39 ADMINISTRATIVE CHARGES FOR Rs. 50.00 lakhs
- 30 Miscellaneous and unforeseen charges fifty lakhs. LS

Under 001-18-000025 (Rupees Fifty Lakhs Only)

Grand Total Amounted For 5000000.00
 Head of A/C. 21178
 GER NO : 6149 Dt: 16-2-18

CERTIFICATE

- 1) Registered and inspected and the work is found to be necessary.
- 2) The rates adopted are as per P.W.P. WTD SR of 2016-17 and data rate of Bangalore Circle.
- 3) The provisions were made in this estimate and necessary and adequate.
- 4) The estimate is under the Bruhat Bengaluru Mahanagara Palike Limits.
- 5) This work is not repeated in any other programs or Grants

Estimate A/Sanctioned
 No 67/17-18
 Dated 16-2-2018
 Assistant Engineer
 Ward No.01

Assistant Executive Engineer
 Yelahanka Sub-Division

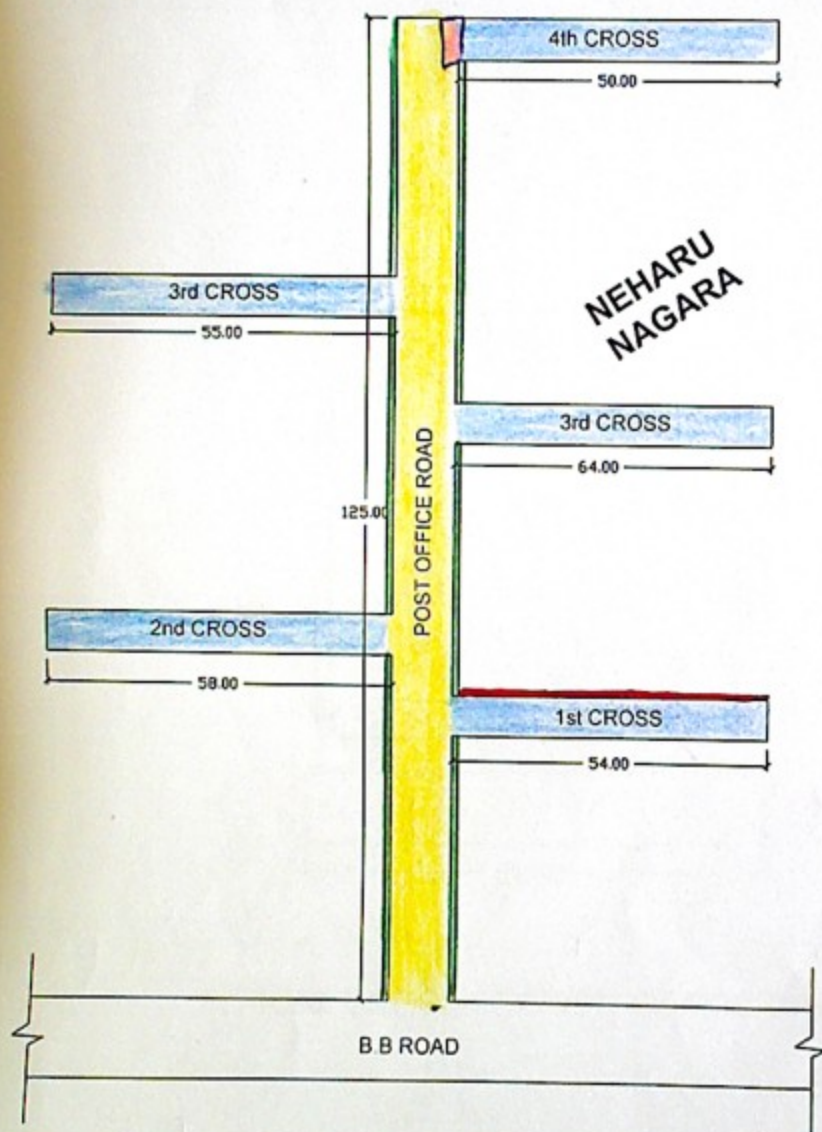
Joint Commissioner
 (Yelahanka Zone)
 DBMP, Bengaluru-92

Executive Engineer
 Yelahanka Division
 Yelahanka Zone
 Bruhat Bangalore Mahanagara Palike
 BANGALORE - 560004

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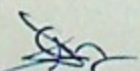
**NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT NEHRU
NAGARA AND SURROUNDING AREAS IN WARD NO.01 OF
YELAHANKA SUB-DIVISION**

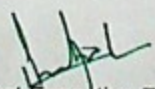
KEY : NOT TO SCALE



INDEX

- RCC DRAIN
- CC ROAD
- CULVERT
- DESILTING
- ASPHALTING


Assistant Engineer
Ward No.01
B.B.M.P


Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P